

Advanced Clean Fuels Technology

GOALS



Coal Preparation

- In coordination with EPA and the utility industry, develop a sound data base of the effectiveness of control technologies in reducing air toxics from power generation.

Coal-Derived Liquids

- By 2005, develop proof-of-concept technology for producing premium-grade liquid fuels from coal at \$25 per barrel (1990 \$) or less.

- The Office of Fossil Energy is developing ways to ensure that coal can meet future air quality standards and, in the longer term, can offer the nation a supplemental source of high-quality liquid fuels.
- The Clean Air Act Amendments direct EPA to establish standards for air toxics. DOE is working with EPA and utilities to establish a sound scientific basis for these standards and to develop advanced coal cleaning techniques that remove air toxic impurities.
- For the post-2000 timeframe, DOE is working on new approaches that might significantly lower the costs of coal-based liquid fuels and chemicals and provide the nation with alternatives to imported petroleum.

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Budget



COAL				
Program Components	FY95	FY96 Conf.	FY97 Request	Cost- Sharing
Coal Preparation	\$7.0	\$4.7	\$5.1	10%
Direct Liquefaction	8.6	5.6	5.9	15%
Indirect Liquefaction	12.2	5.8	4.3	15%
Advanced Research & Environmental Technology	3.9	3.6	0.7	30%
Systems for Coproducts	0.1	—	—	—
Total	\$31.8	\$19.6	\$16.0	

- Coal preparation -- pre-cleaning of coal before it is used -- may be the best, if not the only, way to removing certain impurities that contribute to air toxics. Also, techniques being developed for cleaning finely ground coal may facilitate utility compliance with Clean Air Act Amendments in addition to providing a valuable export technology.

● The liquefaction program has two components: direct liquefaction converts coal directly into a liquid; indirect liquefaction first gasifies coal, then converts the gases into liquids.